Exploring Social Media Addiction Among Secondary Students: Impact on Cognitive Ability, Study Habits, and Psychological Well-being

Synopsis

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INTRODUCTION

As digital natives, school students have been raised in an era of unprecedented technological advancement and interconnectedness. Social media platforms have become deeply integrated into their daily routines, providing a virtual space for self-expression, socialization, and knowledge exchange. However, the excessive utilization of these platforms has raised concerns about addictive behaviors and their potential ramifications on various aspects of students' lives.

This study seeks to examine the multifaceted nature of social media addiction and its consequences for secondary students. By analyzing the relationship between cognitive ability– the state of deep engagement with technology – and study habits, we aim to elucidate how social media usage may affect academic performance and educational outcomes. Furthermore, this research will investigate the correlation between social media addiction and psychological well-being, considering factors such as self-esteem, anxiety, and overall life satisfaction. Also, the association with study habits, and cognitive ability will be studied.

This study will address the pressing need for effective strategies to mitigate social media overuse among school students. Various suggestions and insights will be taken and considered by experts belonging to different domains such as clinical psychologists, education policy makers, educationists, and technology. Their insights will be useful in identifying and evaluating potential interventions, strategies, and their perspectives in order to mitigate the issue like social media addiction.

Through a comprehensive examination of these interconnected factors, this research aims to contribute to the expanding body of knowledge on social media addiction and its impact on secondary students development. The findings of this study may inform the development of targeted interventions and educational programs designed to foster healthy digital habits and promote overall psychological well-being, study habits, and cognitive ability and functions among school students in an increasingly interconnected world. In order to address and mitigate the issue like social media addiction, this study is going to acknowledge the experts suggestion and their views on it. It includes the various experts from psychology, technology, education policy experts, and the academicians.

SOCIAL MEDIA ADDICTION

In the digital era, the excessive use of social media platforms such as Facebook, Instagram, and Twitter

has emerged as a significant issue. This compulsive behavior negatively impacts productivity, interpersonal connections, and psychological well-being. The pervasive nature of social media in everyday life makes it challenging to establish appropriate limits. Studies indicate that the desire for approval through likes and comments stimulates the brain's reward center, fostering a dependence akin to substance abuse. Consequently, individuals experience heightened anxiety, depression, and feelings of inadequacy when comparing themselves to others online. The fear of missing out (FOMO) compels users to repeatedly check their accounts, reinforcing addictive patterns. The constant stream of updates and information from social media creates a perceived need to stay connected, resulting in disrupted sleep patterns, diminished focus, and compromised cognitive abilities. The detrimental effects of social media addiction extend beyond personal well-being, impacting both social relationships and job performance, as incessant notifications interfere with meaningful interactions and work-related tasks.

Social media addiction refers to the excessive and uncontrollable use of social networking platforms, which negatively impacts various aspects of a person's life. People with this addiction rely heavily on social media to cope with stress, anxiety, and loneliness (Nikolinakou et al., 2023). The addiction is driven by triggers, reward systems, and emotional needs, leading to problems with brain function, mental health, and overall well-being (Wang, 2024).

The COVID-19 pandemic has led to the quarantine of people in their homes. It was found that people were spending more time on social media during the pandemic than before the pandemic. Also, the consequences of using Social media sites were the increase in anxiety levels. The predictor of using Social media was mainly loneliness. (Boursier, V. & et al.)

Social media platforms' technical features, including personalization and system quality, play a key role in the development of addiction (Cao et al., 2020). These features are often driven by algorithms designed to enhance user engagement. The study found that informational support, system quality, and personalization influence users' emotional and functional attachment to platforms, which in turn determines social media addiction.

Extrinsic motivators, such as functional support and information quality, contribute to social media addiction by influencing user attachment to platforms (Xu, 2023). Algorithms are typically responsible for curating and delivering this content, potentially exacerbating addictive behaviors. The importance

of entertainment in predicting social media addiction (Leong et al., 2019) can be related to algorithmic content curation. Algorithms are designed to keep users engaged by providing entertaining content tailored to their preferences, potentially leading to increased addiction risk.(Cao et al., 2020) (Xu, 2023) (Leong et al., 2019)

Social media addiction through short-form video content like reels has become increasingly prevalent in recent years. These bite-sized, highly engaging videos are designed to capture users' attention and keep them scrolling for extended periods. The instant gratification and dopamine release associated with consuming this content can lead to compulsive behaviours, with users spending hours mindlessly watching reels.

Instagram's usage tracking feature was used in a study to accurately measure time spent on the platform, which was found to negatively impact relationship satisfaction and lead to addictive use (Bouffard et al., 2021). This suggests that features allowing users to track their usage may inadvertently contribute to addiction. The study on WeChat revealed that technical factors such as informational support, system quality, and personalization play a key role in forming addictive usage behavior (Cao et al., 2020). These features, common across many social media platforms, can foster attachment and potentially lead to addiction.

Triggers, reward mechanisms, and emotional needs fuel this addiction, leading to compromised brain functions, mental health challenges, and overall wellness issues . Consequences may include deteriorated sleep quality, diminished self-esteem, and elevated levels of stress, anxiety, and depression (Tri Prasetyo et al., 2021).

The consequences of social media addiction can include:

- Poor sleep quality
- Lower self-esteem
- Increased stress, anxiety, and depression
- FOMO, Isolation and Loneliness
- Poor Academic performance and decreased productivity

Notably, research indicates that social media addiction is a distinct phenomenon, separate from other addictive behaviors such as brand addiction or impulsive purchasing on social media platforms

(Nikolinakou et al., 2023). The widespread nature of social media addiction is evident, with one study revealing that 37.5% of students in medical and paramedical fields were addicted to social media (Satapara et al., 2024).

Australia came up with the bill to ban the social media for the children under the age 16 years. This landmark decision was passed by the government of the country by observing excessive use of social media which could result in severe mental health problems. It is the proposed law with the penalty of capital. (Times of India, 29 November 2024)

Following this, the addiction driven by online sources like the internet and social media usage affects various aspects of humans. (Primack, BA. & et al.) studied that more social media use results in high social isolation. It deprives the person of the present social conditions by bottling up the competencies to deal with society. According to Jamal Al-menayes (2015), Social media usage and addiction affect negatively on academic achievement of students. It is also related to the predictor called procrastination that poor academic performance could be due to the excessive use of social media. However, Some measures can be taken to prevent the adverse effects of SMA using some strategies advocated by the specialist.

COGNITIVE ABILITY

Cognitive ability is fundamental brain-based skill required to carry out tasks ranging from simple to complex (Kaur et al., 2019) which encompass various mental processes, including attention, perception, memory, thinking, and imagination (Saidakhmetov, 2021). They are essential for higher-order thinking skills such as critical thinking, creative thinking, and problem-solving (Setiono et al., 2017). Mental skills and processes that allow individuals to gain knowledge, comprehend ideas, and engage with their surroundings are known as cognitive abilities. These encompass a broad spectrum of mental functions, such as focus, recall, sensory interpretation, logical thinking, issue resolution, and verbal communication. Cognitive ability is fundamental to learning, making choices, and adjusting to novel circumstances.

Cognitive ability can be categorized into general and specific domains. General cognitive ability includes working memory, processing speed, and long-term memory, while specific abilities in the context of mathematics include approximate and exact numerical systems (Soltani & Mirhosseini,

2019). Interestingly, the development of cognitive ability is influenced not only by individual factors but also by cultural contexts, challenging the notion of a purely universal and age-dependent pattern of cognitive growth (Grosser & Lombard, 2007).

Hence, conclusion, cognitive ability plays a crucial role in academic achievement, decision-making, and everyday life. Research has shown that these abilities can be enhanced through training, such as critical thinking activities (Kaur et al., 2019). Furthermore, the development of cognitive ability is supported by both general cognitive processes and specific knowledge, which emerge early in development and continue to grow over time (Toplak, 2021). Understanding and nurturing these abilities is essential for educational and personal development across various age groups and cultural backgrounds.

They are vital for scholastic achievement, career advancement, and daily life activities. While certain cognitive abilities are inherent, many can be enhanced through education, instruction, and repetition. The study of cognitive ability is significant for teachers, psychologists, and researchers in fields like neuroscience and artificial intelligence, as it offers insights into human thought processes and learning mechanisms.

STUDY HABITS

Academic success often hinges on effective study habits, which encompass the consistent patterns, behaviours, and methods students employ in their scholarly pursuits. These practices cover a wide range of learning aspects, including efficient time allocation, systematic organization, participatory learning techniques, effective note-taking, strategic reading, optimal environment selection, purposeful goal-setting, personal discipline, stress reduction, and peer collaboration. Successful time management involves dedicating specific time slots for studying and maintaining a regular routine, while organizational skills require keeping study materials, notes, and workspaces in order. Participatory learning promotes engagement with course content through methods such as summarization, inquiry, and self-assessment. Mastering efficient note-taking techniques and implementing reading strategies like quick scanning, targeted searching, and interactive reading are essential for understanding and remembering information. Selecting suitable study environments that reduce interruptions and enhance concentration is crucial for productive learning sessions. Establishing clear, attainable objectives for

individual study periods and long-term academic aspirations helps sustain focus and drive. Self-discipline is critical for task completion and overcoming procrastination, while stress-coping mechanisms aid in managing academic pressures and maintaining mental health. Engaging in group study sessions or seeking assistance from classmates and educators can enrich the learning experience. Effective study habits are fundamental to academic achievement, enabling students to learn more efficiently, retain knowledge better, and excel in evaluations. Developing beneficial study practices often requires trial and adjustment to identify the most appropriate methods for individual learning preferences and requirements.

Key aspects of study habits include:

- Time management: Creating and following a study schedule, and allocating appropriate time for different subjects.
- Environment selection: Choosing suitable study locations that promote focus and minimize distractions.
- Active learning techniques: Employing methods such as note-taking, summarizing, and self-quizzing to enhance understanding and retention.
- Regular review: Consistently revisiting and reinforcing previously learned material.
- Organization: Maintaining organized study materials and resources for easy access and reference.
- Goal-setting: Establishing clear, achievable academic goals to maintain motivation and track progress.
- Self-discipline: Developing the ability to stay focused and avoid procrastination.
- Seeking help: Recognizing when additional support is needed and utilizing available resources such as tutors or study groups.

Research suggests that effective study habits are positively correlated with academic achievement. However, many students struggle to develop and maintain good study habits, which can lead to poor performance in tests and examinations. Additionally, gender differences in study habits have been observed, potentially impacting learning outcomes differently for male and female students.

Developing good study habits is essential for academic success and can contribute to lifelong learning skills, adaptability, and improved earning potential throughout one's career.

PSYCHOLOGICAL WELL-BEING

Psychological well-being is a multifaceted concept influenced by various factors, including emotional intelligence, social support, and environmental conditions. Studies have shown that emotional intelligence and perceived social support are positively associated with psychological well-being among nurses (Entrata & Nicomedes, 2024). Similarly, research across diverse populations has consistently demonstrated a modest but reliable relationship between social support and psychological well-being (Turner, 1981).

Psychological well-being encompasses self-acceptance, personal growth, purpose in life, environmental mastery, autonomy, and positive relationships. Self-acceptance is characterized by a positive attitude towards oneself, acknowledging both strengths and weaknesses. Personal growth involves continuous self-improvement and the realization of one's potential. Purpose in life entails having goals and a sense of direction that imbues life with meaning. Environmental mastery refers to the ability to effectively manage one's surroundings and responsibilities. Autonomy is defined as the capacity for independent thought and action, as well as the ability to resist social pressures. Positive relationships involve the formation and maintenance of warm, trusting, and mutually beneficial connections with others.

Surprisingly, the impact of social support on psychological well-being may vary depending on the context and population. For instance, in juvenile offenders, the relationship between perceived social support and psychological well-being differed between those in pretrial detention and those in correctional camps (Ushkov et al., 2019). Additionally, the stress-buffering effect of social support on psychological well-being has been observed in farmers, with friends and significant other support having a greater impact than family support (Deegan & Dunne, 2022).

Key components of psychological well-being include:

- Self-acceptance: Embracing one's strengths and weaknesses, leads to a positive self-image and self-worth.
- Personal growth: Continuously developing skills, seeking new experiences, and viewing challenges as opportunities for improvement.
- Purpose in life: Having clear goals, a sense of direction, and finding meaning in daily activities and long-term aspirations.

- Environmental mastery: Effectively managing one's surroundings, adapting to various situations, and feeling competent in handling life's challenges.
- Autonomy: Making independent decisions, resisting social pressures, and maintaining personal standards and values.
- Positive relationships: Cultivating and maintaining meaningful connections with others, characterized by trust, empathy, and mutual support.

These components contribute to overall mental and emotional health, fostering resilience, life satisfaction, and improved quality of life. Individuals with high psychological well-being typically demonstrate effective problem-solving skills, adaptability, and a strong sense of self-worth.

In conclusion, psychological well-being is influenced by a complex interplay of factors, including social support, emotional intelligence, and environmental conditions. The relationship between social support and psychological well-being appears to be bidirectional, with evidence suggesting causation in both directions (Turner, 1981). Furthermore, interventions aimed at improving social support have shown potential in enhancing psychological well-being (Darbyshire & Stenfert Kroese, 2012). These findings highlight the importance of considering multiple factors when addressing psychological well-being and developing targeted interventions for different populations.

EMERGENCE OF THE PROBLEM

The widespread adoption of social media by teenagers has sparked increasing worry about its potential negative impacts on their cognitive, educational, and mental development. Secondary students, who are in a crucial phase of cognitive and academic growth, are especially susceptible to social media addiction. The omnipresence of social media platforms, coupled with constant notifications and engaging content, can lead to overuse and potentially social media addiction (SMA). Moreover, excessive social media usage is linked to poor academic habits, reduced scholastic achievement, and mental health issues such as anxiety, depression, and stress. Despite these findings, a considerable portion of current research has centred on secondary students, creating a significant gap in understanding SMA's effects on them during their formative years.

Khan, S. (2012) studied that students whose ages range from 15 to 25 mostly use social networking websites for entertainment. Martin, F. & et al. (2018) studied that 17% started using social media at the

age of nine or younger. These school students reported using social media most often to connect with their friends, share pictures, and find out what others are doing. They indicated that Instagram (27%), Snapchat (25%) and YouTube (25%) were their most used social media sites. These students are worried about social media because of issues like inappropriate posts, getting hacked, hurt feelings, mental health, lack of privacy, inappropriate pictures, bullying, negativity, and stalking.

Social media usage and social media addiction impact the academic aspect of the learner. It was studied by Zhao, L. (2023) that Social media use and stress have a significant negative impact on the academic performance of students. Hou, Y & et al. (2019) studied that if social media addiction rises, the academic achievement along with the mental health of students would decrease. The impaired psychological well-being tends to affect the academic as well as study habits of the students. The predictors of social media addiction such as stress, anxiety, loneliness, and others, tend to give birth to the academic procrastination which is further needs to be studied.

Many educational institutions in developing countries adopted social media sites to maintain e-learning and sustaining education process. The distinction between online and real-world communities is becoming increasingly narrow, especially among the younger generations who have grown up with social media at their fingertips. As a result of the COVID-19 pandemic, e-learning has replaced traditional teaching methods. The COVID-19 pandemic posed a threat to humanity, as it forced the shutdown of a wide range of global activities, including educational ones in many countries, including India (Abu Elnasr E. Sobaih & et al.). This leads to the engagement and usage of social media among school students, which they are now relied upon social media for their educational purposes. The usage of social media could lead to the problems such as social media addiction, if engagement is not controlled.

Hence, With the growing prevalence of social networking sites and the increasing reliance on digital platforms, especially among youth, concerns about social media addiction have emerged. While these technologies offer numerous benefits, their excessive use has led to concerns about social media addiction, which negatively affects academic performance, cognitive functions and psychological well-being. The relationship between social media usage and mental health issues is becoming increasingly evident. The COVID-19 pandemic further intensified the use of social media, highlighting the urgent

need to understand its impact and explore mitigating strategies like digital detox.

This research stems from the pressing need to explore how SMA affects cognitive abilities, study habits, and psychological health among secondary school students. By examining these interconnected areas, the study aims to offer a thorough understanding of SMA's impact and contribute to developing targeted and developing strategies that encourage responsible social media use, boost academic performance, and support adolescents' mental well-being.

JUSTIFICATION OF THE PROBLEM

Social media has become an integral part of adolescents' lives, offering various benefits such as connectivity, information sharing, and entertainment. However, the excessive and uncontrolled use of social media platforms has led to a growing concern about social media addiction (SMA), particularly among high school students. This age group is at a critical developmental stage where cognitive, academic, and psychological growth are pivotal.

Cognitive factors, such as maladaptive cognition and the fear of missing out, have been shown to mediate the relationship between dual filial piety and social networking addiction (Wan et al., 2024). This suggests that cognitive processes play a significant role in the development and maintenance of social media addiction. Additionally, cognitive flexibility has been found to both mediate and moderate the effect of social media addiction on phubbing behaviour, highlighting the complex interplay between cognitive processes and social media use (Tanhan et al., 2023).

The studies consistently demonstrate a strong connection between cognitive factors and social media addiction. Cognitive absorption, maladaptive cognition, cognitive function, cognitive ability and cognitive flexibility all appear to play important roles in the development and manifestation of social media addiction. These findings underscore the importance of considering cognitive processes when developing interventions and prevention strategies for social media addiction.

Social media addiction has been found to have significant impacts on students' study habits and academic performance. Several studies have explored this relationship, revealing both direct and indirect effects.

Research indicates that excessive social media use can negatively affect students' academic performance and study habits. For instance, a study on university students found that those who spent more time on

social media platforms had a higher risk of social media addiction, impacting their academic performance (Akther, 2023). This finding is supported by another study that observed a negative correlation between social media addiction and students' academic performance, suggesting that excessive use of social media can lead to a decline in academic achievement (Wei, 2023).

The relationship between social media addiction and academic performance is not always straightforward. Some studies have identified mediating factors that influence this relationship. For example, research has shown that self-esteem plays a mediating role between social media addiction and mental health, which can indirectly affect academic performance (Hou et al., 2019). Additionally, factors such as social ostracism and satisfaction with family life have been found to mediate the relationship between social media addiction and its negative outcomes, potentially including academic performance (Taş, 2021).

The available research strongly suggests that social media addiction can have detrimental effects on students' study habits and academic performance. These effects can be both direct, through time displacement and distraction, and indirect, through impacts on mental health and self-esteem. The findings underscore the need for interventions to promote responsible social media use among students and to provide support for those struggling with social media addiction (Akther, 2023; Hou et al., 2019). Future research could focus on developing and testing effective strategies to mitigate the negative impacts of social media addiction on academic performance and study habits.

Social media addiction has been consistently associated with negative impacts on psychological well-being across multiple studies. Research indicates a complex relationship between excessive social media use and various mental health issues.

The excessive use of social media can lead to addiction-like behaviors, affecting cognitive functions such as attention, memory, and critical thinking (Shanmugasundaram & Tamilarasu, 2023). Research has shown that social media addiction can cause forgetfulness, panic, dead-end thoughts, and a lack of logical thinking (Silvianetri, 2021). Additionally, studies have revealed a direct link between extensive social media engagement and increased anxiety and depression (Yildirim et al., 2023).

Several studies have found significant correlations between social media addiction and mental health problems. For instance, a study on nursing students revealed associations between social media

addiction and depression, anxiety, and stress (Zaw & Azenal, 2021). Another study found that social media addiction was predicted by anxiety, loneliness, and emotional suppression (Nikolinakou et al., 2023). Additionally, research has shown links between social media addiction and social appearance anxiety among young adults (İnik et al., 2024). While most studies focus on negative impacts, some research suggests that brand addiction and impulse buying on social media may be positively predicted by mindfulness, happiness, and self-esteem (Nikolinakou et al., 2023). This highlights the complex nature of social media's effects on psychological well-being. The majority of studies indicate that social media addiction negatively impacts psychological well-being, contributing to issues such as depression, anxiety, stress, and loneliness. A longitudinal study found that social media addiction was associated with an elevated risk for depression and negatively impacted mental well-being and social functioning (Santini et al., 2024). These findings emphasize the need for preventive measures and interventions to address social media addiction and its effects on mental health, particularly among young adults and adolescents (Halim et al., 2023; Purificacion & Vallespin, 2024).

Secondary students are particularly vulnerable to Social media addiction (SMA) due to their developmental stage, characterized by increased social engagement and emotional sensitivity. Research demonstrates that SMA affects cognitive absorption, study habits, and psychological well-being, but most existing studies focus on university students or young adults, leaving a research gap concerning secondary students. Addressing this gap is crucial as SMA in this age group may disrupt cognitive functions, hinder academic performance, and contribute to mental health challenges during a formative period. Therefore, this study will provide valuable insights into how SMA influences secondary students, aiding in the development of strategies derived from experts such as Educationists and Psychologists. Few studies have integrated cognitive ability, study habits, and psychological well-being into a single framework, especially for adolescents. Most research enquired about the relationship between SMA and other stated variables, and limited research has shown the impact of SMA on these likewise stated variables.

This study aims to fill these gaps by exploring the interconnected effects of SMA on cognitive abilities, study habits, and psychological well-being among secondary students. The findings will be instrumental in designing school-based programs and parental guidance strategies to address SMA and its

consequences effectively.

STATEMENT OF THE PROBLEM

"Exploring Social Media Addiction Among Secondary Students: Impact on Cognitive Ability, Study Habits, and Psychological Well-being."

OPERATIONAL DEFINITIONS

- **Social Media Addiction**

Social media addiction is a form of technological addiction that involves the compulsive use of social media platforms, leading to negative consequences in personal, social, and professional spheres. Like other behavioural addictions, it manifests through tolerance, withdrawal, and neglect of other activities. (Griffiths, 2005)

Operational Definition

Social media addiction is a compulsive reliance on online platforms, marked by increased tolerance for extended use, preference for virtual over face-to-face interactions. It includes excessive consumption of virtual information, frequent virtual communication leading to the virtual problem. It causes information overload, diminished focus, and disruption of daily life and overall well-being.

- **Cognitive Ability**

Cognitive ability refers to aptitude for carrying out mental processes, such as problem solving, adaptation, comprehension, reasoning, knowledge acquisition, abstract thought, and making connections (Flavell, 1999)

Operational Definition

Cognitive ability refers to the mental capacity for acquiring, processing, and applying knowledge through various cognitive processes, including memory, abilities such as numerical and verbal, reasoning abilities consisting abstract and verbal.

- **Study Habits**

According to Subramanian (1986), study habits refer to how learners approach their learning tasks, focus on engaging with materials, manage their time, and apply cognitive strategies such as self-testing and active reading to improve their understanding.

Operational Definition

Study habits refer to the patterns of academic behaviour and learning strategies that are often negatively influenced by excessive and compulsive use of e-resources, consciously and unconsciously. Effective study habits typically comprehension, academic use of e-resources, academic interaction, study sets, and drilling.

- **Psychological Well-being**

Psychological well-being refers to an individual's overall positive functioning, characterized by the presence of positive emotions, satisfaction with life, and the ability to cope effectively with stressors. It involves a balance between emotional stability, life satisfaction, and a sense of purpose. (Ryff & Keyes, 1995)

Operational Definition

Psychological well-being is a complex, multifaceted concept that encompasses an individual's personal growth, autonomy, daily task efficiency, social competence, mental health stability, and the quality of their interpersonal connections.

RESEARCH QUESTIONS

- What are the social media platforms which are used by the secondary students?
- What social media platforms contributing to the social media addiction?
- What are the levels of social media addiction among secondary school students?
- Is there any difference in social media addiction between males and females?
- What is the relationship between social media addiction and cognitive ability among secondary students?
- What is the relationship between social media addiction and study habits among secondary students?
- What is the relationship between social media addiction and psychological well-being among secondary students?
- What is the contribution of social media addiction to the cognitive ability, study habits, and psychological well-being of secondary students?
- What measures could be taken to reduce social media addiction among secondary students?

OBJECTIVES OF THE STUDY

- To study the social media platforms used by the secondary school students
- To study the specific social media platforms that contribute to social media addiction
- To study the levels of social media addiction among the secondary students
- To compare the social media addiction of male and female secondary students
- To study the relationship between social media addiction and cognitive ability of secondary students
- To study the relationship between social media addiction and the study habits of secondary students
- To study the relationship between social media addiction and the psychological well-being of secondary students
- To find out the contribution of social media addiction to cognitive ability
- To find out the contribution of social media addiction to study habits
- To find out the contribution of social media addiction to psychological well-being
- To explore experts perspectives on mitigating strategies for reducing social media addiction.

HYPOTHESES OF THE STUDY

- Ho: There will be no significant difference in the levels of social media addiction among secondary school students
- Ho: There will be no significant difference between social media addiction of secondary students from private schools and government schools
- Ho: There will be no significant difference between social media addiction of male and female secondary students
- Ha1: There will be significant relationship between social media addiction and cognitive abilities of secondary students
- Ha2: There will be significant relationship between social media addiction and the study habits of secondary students
- Ha3: There will be significant relationship between social media addiction and the psychological well-being of secondary students
- Ha4: There will be significant contribution of social media addiction to cognitive ability
- Ha5: There will be significant contribution of social media addiction to study habits

- Ha6: There will be significant contribution of social media addiction to psychological well-being

VARIABLES OF THE STUDY

a) Predictor Variable- Social Media Addiction

b) Criterion Variables- Cognitive Ability, Study Habits, and Psychological Well-being

c) Intervening Variable- Gender, School types

RESEARCH PROCEDURE

- Descriptive Survey Method- Mixed-method approach will be employed to conduct the study, it will include the combination of both quantitative and qualitative methods. In this study, the data coming from the quantitative approach will lead to the use of the qualitative approach. The researcher is executing the descriptive survey method considering the nature of the research work and problem. The researcher will conduct an interview session with the experts.
- Population and Sample of the Study- The target population of the study is secondary students of CBSE schools of Agra District. The sample of the study will be 500 students (250 Male & 250 Female) of the secondary level of CBSE board. For the present investigation, 10 schools of two school types (Private & Government) will be selected in proportion by using the stratified sampling method, and the selection of students will be from the simple random sampling method. The selection of experts will be from the purposive sampling method. The 15 experts from psychology, technology, education policy, and academicians will be interviewed to get data.
- Tools for the Study-

a) Social Media Addiction: Social media scale- Student form by Cengiz Sahin (2018) consisting dimensions through which it will be measured, like virtual tolerance, virtual communication, virtual problem, and virtual information.

b) Cognitive Ability: Cognitive ability test by Madhu Gupta & Bindiya Lakhani (2018) consisting dimensions through which it will be measured, like memory, verbal, numerical, abstract reasoning, and verbal reasoning.

c) Study Habits: Study habits scale by Dimpal Rani & M.L. Jaidka (2015) consisting dimensions through which it will be measured, like concentration, comprehension, planning, use of e-resources, interaction, study sets, and drilling.

d) Psychological Well-being: Psychological well-being scale (self-constructed)- dimensions of the proposed test will be life satisfaction, personal growth, autonomy, daily task efficiency, social competence, mental health stability, and the quality of interpersonal connections. The test will be validated and the reliability will also ensure which will established through the pilot study.

e) Interview Schedule: Structured interview will be conducted by the researcher.

- Statistical Techniques

a) Descriptive Statistics- Mean & SD, Pearson's Product moment correlation, Testing of Normality of the data.

b) Inferential Statistics- Critical Ratio (C.R.), One-way ANOVA, Linear Regression.

- The Thematic analysis method of the qualitative approach will be used to interpret the result coming from the data drawn from the interview. The analysis will be done by using NVIVO software. The coding will be executed using this software. By reading the each transcript and creating nodes for emerging ideas or themes such as causes of SMA, mitigation strategies for reduction of SMA. Furthermore, a narrative report summarizing the themes and their relevance will be the interpretations.

DELIMITATIONS OF THE STUDY

- The study is delimited to the secondary students only.
- The experts selected to mitigate social media addiction are delimited to the field of psychology, technology, education, policy makers, and academics only.
- The school board selected for the study is CBSE.
- The study is delimited to the Agra district only.

IMPLICATIONS OF THE STUDY

This study will provide valuable insights into the impact of Social Media Addiction (SMA) on secondary students, with a particular focus on shaping school policies, enhancing digital literacy programs, and strengthening parental guidance frameworks. By examining how SMA affects cognitive ability, study habits, and psychological well-being, the research will offer data-driven recommendations for schools to develop policies that promote responsible social media use while ensuring a balanced academic environment. Educational institutions can implement structured guidelines that encourage students to

manage screen time effectively, maintain focus on studies, and prioritize mental health. Additionally, the study will emphasize the importance of digital literacy programs, equipping students with critical thinking skills to assess online information, recognize misinformation, and navigate social media safely. Media literacy education will also address privacy concerns, cyberbullying, and addictive behaviours, fostering a culture of responsible digital engagement. Moreover, parental guidance frameworks will benefit from the research by providing parents with evidence-based strategies to monitor and regulate their children's social media use. By understanding the effects of excessive social media engagement, parents can implement practical interventions that promote healthier digital habits, enhance academic performance, and support emotional well-being. Through a combination of well-informed school policies, comprehensive digital literacy programs, and proactive parental involvement, this research will contribute to creating a balanced and supportive learning environment that safeguards students from the negative consequences of SMA.

ETHICAL CONSIDERATION FOR THE STUDY

It is pivotal part of the research to consider ethical norms. During the study it becomes more essential to follow some guidelines and protocols. Researcher in the study will follow and consider all ethical norms. The researcher will seek permission from the institute before proceeding to schools for data collection and will also obtain approval from experts. Upon reaching the school, the researcher will request permission to collect data. Additionally, the researcher will seek consent from teachers and parents before gathering information from students. Before distributing the questionnaire, the researcher will ensure that students provide their informed consent. Confidentiality of the collected data will be maintained, and students will be informed about this measure. Data from experts will be gathered through structured interviews, and their consent will be obtained beforehand. The researcher will also ensure the privacy of the experts' insights.

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